

Application No.: 10/658730

Case No.: 59003US002

REMARKS**112 Rejections**

Claims 1-18 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. Specifically, the term “a cross-web direction” is said to be indefinite because the specification does not clearly define the term.

Applicants submit that “cross-web direction” is well understood by one of skill in the art and the term is being used in its ordinary sense. For an example of the meaning of cross-web, please refer to, for example, U.S. Patent No. 6,758,992, column 3, lines 12-13, Solomon et al. Applicants submit that one of skill in the art understands that “cross-web direction” is being used in its ordinary meaning and that claims 1-18 are not indefinite in light of the above.

102 Rejections

Claims 1-10, 20, and 21 stand rejected under 35 USC § 102(b) as being anticipated by Yamashita et al. (6,325,880). It was stated that Yamashita et al. disclose lenticular sheets with first and second patterns that are registered to within 100 microns in a cross-web direction (citing figures 3a, 3b, and the related disclosure).

Claim 1 requires, among other things, first and second patterns registered to within 100 microns in a cross-web direction wherein the first and second patterns are located on first and second opposed surfaces respectively. Yamashita et al. do not teach a microreplicated article including first and second patterns registered to within 100 microns in a cross-web direction, as is required by claim 1. Applicants’ review of disclosure of Yamashita et al. does not indicate any teaching or suggestion of registering patterns on opposite sides or surfaces of a flexible substrate. Yamashita et al. disclose elements arranged having a pitch of 0.1 to about 0.2 millimeters, column 15, lines 33-35. “Pitch” and “registration” have different meanings and can be understood in the context in which both terms are used.

However, there is no teaching or suggestion of arranging such elements as is required by claim 1, that is, being registered to within 100 microns in a cross-web direction when the first and

Application No.: 10/658730

Case No.: 59003US002

second patterns are located on first and second opposed surfaces of a flexible substrate. For the reasons given, therefore, claim 1 is patentable over the cited reference.

Claims 2-10 depend from and further limit independent claim 1. For at least the same reason that Yamashita et al. do not teach or suggest independent claim 1, claims 2-10 are likewise patentable.

Claim 20 is directed to, among other things, a method wherein first and second microreplicated pattern structures are formed on opposed first and second surfaces of a substrate, wherein the first and second structures are registered to within about 100 microns. As discussed above, Yamashita et al. do not disclose or suggest a method wherein first and second microreplicated pattern structures on opposed surfaces are registered to within about 100 microns. Therefore, claim 20 is patentable over Yamashita et al.

Claim 21 depends from and further limits independent claim 20. For at least the same reasons, claim 21 is likewise patentable.

103 Rejections

Claims 11-19 stand rejected under 35 USC § 103(a) as being unpatentable over Yamashita et al.

As a preliminary matter, it is stated that Yamashita et al. teach making an article wherein first and second patterns are registered to within 100 microns in a cross-web direction (citing figures 3a, 3b, and the related disclosure). As was discussed above with respect to claims 1 and 20, Yamashita et al. do not disclose or suggest making first and second patterns registered to within 100 microns in a cross-web direction. (Yamashita et al. do suggest a pitch of 0.1 mm.) For this reason alone, claim 11 is not obvious in light of the cited reference.

Claim 11 is directed to a method of making a microreplicated article including, among other things, first and second patterns that are registered to within about 100 microns in a cross-web direction. Claim 11 also requires that said article is created by passing the web through a casting apparatus and coating first and second liquids onto the web substrate and subsequently curing each coated liquid to form microreplicated patterns.

The Office Action states that Yamashita et al. do not disclose coating the first and second liquid on the first and second surfaces respectively. It goes on to state that such coating on the

Application No.: 10/658730

Case No.: 59003US002

first and second surface of the substrate by plastic film or a liquid are well known. It goes on then to say that those skilled in the art would recognize that replacement of the plastic film with liquid would have been an obvious expedient at the time of the invention.

Applicants submit that the rejection as stated does not make a prima facie case of obviousness, in that all the elements of claim 11 are not taught or suggested by modifying the cited reference. Claim 11 also requires that the liquids are cured to create the microreplicated patterns. The rejection, as stated, does not particularly point out where there is a teaching or suggestion to cure the liquid, as is required by claim 11. Therefore, for at least the reasons given, claim 11 is patentable over the cited reference.

Claims 12-19 depend from and further limit independent claim 11. For at least the same reasons, claims 12-19 are patentable.

Application No.: 10/658730

Case No.: 59003US002

Conclusion

Applicants respectfully request reconsideration of the rejections in light of the above arguments. Reconsideration of the application is respectfully requested and Applicants respectfully request a Notice of Allowance issue. If the Examiner feels that a telephone conference would help to foster a better understanding of the case, the Examiner is invited to contact the undersigned at (651) 736-6432.

Respectfully submitted,

May
Date

18

2005

By:



Rick L. Franzen, Reg. No.: 51,702

Telephone No.: (651) 736-6432

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833